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# Amendments to the Drawings

Please replace Figures 1-A, 1-B, 2-A, 2-B, 3, 5-A, 5-B, 5-C, 5-D and 6 with the amended drawings set out in the enclosed replacement sheets.

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### REMARKS

The Applicant has amended claims 1, 11, 13, 18, 19, 21, 22, 25, 27, 28, 30, 37, 39-41, 43, 44, 52, 58 and 59 and has added new claims 70-71. These amendments and new claims add no new matter and are submitted to be completely supported by the application as originally filed. The Applicant has also cancelled claims 61-69.

Claims 1-60 and 70-71 are pending after this amendment.

## Affirmation of Election

The Applicant has affirmed the election to prosecute claims 1-60 (invention I identified in the Office Action).

The Applicant has added new claims 70-71. New claims 70-71 depend from claim 21 and are therefore submitted to fall within invention I identified in the Office Action.

## Objections to the Drawings

The Examiner has raised a number of objections to the drawings. The Applicant has addressed these objections by amending a number of the reference numerals contained in the drawings and/or by amending a number the reference numbers contained in the description. In particular, the Applicant has:

- removed reference numeral "58" from Figure 2A;
- added reference numeral --125-- to Figure 3;
- respectively replaced reference numerals "72" and "74" with reference numerals
  -172-- and -174-- in the first full paragraph on page 23 and in Figures 5-A, 5-B and 5-C;
- added reference numeral --70'-- in the paragraph spanning pages 23 and 24;
- respectively replaced reference numerals "72", "74" and "74A" with reference numerals --172--, --274-- and -274A-- in the paragraph spanning pages 23 and 24 and in Figure 5-D;
- removed reference numerals "44" and "81" from Figure 6;
- replaced reference numeral "188A" with reference numeral --118A-- in the paragraph spanning pages 24 and 25; and
- removed the reference numeral "137" in the first full paragraph on page 27.

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Some of the drawings, including Figures 1-A, 1-B and 2-B, have also been amended to provide better quality drawings.

These drawing amendments are reflected on the replacement sheets enclosed herewith. These amendments to the drawings and the description contain no new matter and are submitted to be completely supported by the application as originally filed. The Applicant submits further that the amendments to the drawings and the specification obviate the drawing objections raised by the Examiner.

# Allowable Subject Matter - Claims 11, 12, 25, 26, 37, 38, 52 and 53

The Examiner has indicated that claims 11, 12, 25, 26, 37, 38, 52 and 53 would be allowable if rewritten in independent form to include the features of their respective base claims and any intervening claims. The Applicant has done this by:

- amending claim 11 to include the features of originally filed claim 1;
- amending claim 25 to include the features of originally filed claim 21;
- amending claim 37 to include the features of originally filed claim 30; and
- amending claim 52 to include the features of originally filed claim 44.

Accordingly, the Applicant submits that claims 11, 25, 37 and 52 are in condition for allowance. Dependent claims 12, 26, 38 and 53 are submitted to be allowable for at least the reason that they respectively depend from allowable base claims 11, 25, 37 and 52.

#### Claims 1-5, 7-10 and 13-18

The Examiner has raised the combination of US patent No. 6,180,325 (Gelbart) and US patent No. 6,326,124 (Alince et al.) in relation to claims 1-5, 7-10 and 13-18. The Applicant submits that claims 1-5, 7-10 and 13-18 patentably distinguish the combination of Gelbart and Alince et al.

As understood by the Applicant, Gelbart discloses a method for exposing photosensitive printing plates comprising applying a patterned coating to the printing plate to form a surface mask. The coating may be sprayed onto the printing plate and patterned by laser ablation. The printing plate may be exposed to actinic radiation without dismounting it from the apparatus on which the surface mask is applied.

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Alince et al. disclose an edge-covering material and a process for preventing undesirable ridges from exposure of laser-processible, photopolymerizable printing plates premounted on sleeves or cylinders. The edge-covering material contains at least one soluble, film-forming polymer, at least one UV absorber and a solvent or solvent mixture. The edge-covering material is applied to the edges of the photo-polymerizable printing plate before imagewise exposure of the photopolymerizable printing plate.

Claim 1, as amended, recites the combination of "obtaining, in a controller, electronic data corresponding to a location of at least one edge of the printing plate; and while the printing plate is on the drum: ... applying an edge masking layer to the at least one edge, the edge masking layer masking at least a portion of the photosensitive imageable layer on the at least one edge; ... wherein applying the edge masking layer comprises automatically applying the edge masking layer in the location of the at least one edge under control of the controller."

The Examiner suggests, in the first paragraph on page 5 of the Office Action, that Gelbart does not teach or suggest applying an edge masking layer to an edge of a printing plate to mask the photosensitive imageable layer on the edge. Alince et al. describe an edge-coating material for application to the edges of a photo-polymerizable printing plate and teach that the edge-coating material is applied to the edges of the plate by fine pipette (col. 4, ln. 7), brushing or spraying (col. 3, ln. 32). The application techniques for the edge-masking material disclosed by Alince et al. are manual techniques. Alince et al. fail to teach or suggest that "electronic data corresponding to a location of at least one edge" is obtained "in a controller" as recited in claim 1. Alince et al. also fail to teach or suggest the claim 1 feature of "automatically applying the edge masking layer in the location of the at least one edge under control of the controller".

The Applicant submits that it would not be obvious to further modify the Alince et al. edge masking technique to obtain electronic data relating to edge locations in a controller and to apply the edge-masking material under the control of the controller. The application techniques disclosed by Alince et al. include manual application techniques. Alince et al. specifically teach the manual application of edge-masking material using a pipette (col. 4, ln. 7). Manual application techniques (e.g. pipette) are not performed under control of a controller as recited in claim 1. Alince et al. make no mention of applying edge masking material under control of a controller as recited in claim 1.

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Based on this reasoning, the Applicant submits that claim 1 patentably distinguishes the combination of Gelbart and Alince et al. Claims 2-5, 7-10 and 13-18 depend from claim 1 and are submitted to be patentable over Gelbart and Alince et al. for at least this reason.

Furthermore, claim 13, as amended, recites that "applying the edge masking layer to the at least one edge of the printing plate is at least partially completed after commencing, but prior to completion of, applying the surface mask layer to the printing plate." This feature is not disclosed or suggested by either Gelbart or Alince et al. Gelbart does not disclose applying an edge masking layer to an edge of a printing plate. Alince et al. disclose that the printing plate is pre-coated with a surface mask prior to mounting the plate on the sleeve and prior to applying the edge-masking material to the edges of the plate (see col. 2, ln. 16-28). Alince et al. also disclose that the edge-masking material is applied before patterning the surface mask. Alince et al. do not disclose or suggest that an edge-masking layer is applied to the edges of a printing plate after commencing, but prior to completing, the application of the surface mask as recited in claim 13. Accordingly, the Applicant submits that claim 13 further distinguishes the combination of Gelbart and Alince et al.

Claim 17 recites that "the surface mask layer comprises a positive working material and the edge masking layer comprises a negative working material". This feature is not disclosed or suggested by either Gelbart or Alince et al. Gelbart does not teach or suggest the application of an edge mask. Alince et al. do not teach or suggest that the edge mask can operate using a process different than that of the surface mask. Alince et al. specifically teach at col. 4, ln. 7-14, that after application, the edge masking material is merely dried and then used as a mask without further processing. This is not a characteristic of a negative working material. The Examiner expresses the view that this claim 17 feature would be obvious to a person skilled in the art in order to produce a more precise printing plate. The Applicant respectfully submits that the Examiner has misinterpreted the features of this claim. The provision of a surface mask as a positive working material and an edge mask as a negative working material is not directly correlated to the precision of a printing plate. Accordingly, a person skilled in the art would not be motivated to modify the teachings of Gelbart and/or Alince et al. to provide a positive working surface mask and a negative working edge mask for the purpose of improving the precision of a printing plate. Based on this reasoning, the Applicant submits that claim 17 patentably distinguishes the combination of Gelbart and Alince et al.

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Claim 18 recites that "obtaining, in the controller, electronic data corresponding to the location of the at least one edge comprises determining the location of the at least one edge based on at least one of: format data provided to an automated printing plate cutting device: and format data provided to a printing plate mounting device." The Applicant submits that neither Gelbart nor Alince et al. disclose or suggest this claim 18 feature. Neither Gelbart nor Alince et al. make any mention of printing plate cutting devices, printing plate mounting devices or format data provided to such devices. Accordingly, the Applicant submits that claim 18 further distinguishes the combination of Gelbart and Alince et al.

#### Claim 6

The Examiner has raised the combination of Gelbart, Alince et al. and US patent No. 6,312,871 (Cusdin et al.) in relation to claim 6. The Applicant submits that claim 6 patentably distinguishes the combination of Gelbart, Alince et al. and Cusdin et al.

Claim 6 depends from claim 1. As discussed above, the combination of Gelbart and Alince et al. fails to teach or suggest the claim 1 combination of "obtaining, in a controller, electronic data corresponding to a location of at least one edge of the printing plate; and while the printing plate is on the drum: ... applying an edge masking layer to the at least one edge, the edge masking layer masking at least a portion of the photosensitive imageable layer on the at least one edge; ... wherein applying the edge masking layer comprises automatically applying the edge masking layer in the location of the at least one edge under control of the controller." Cusdin et al. fail to remedy this deficiency with the disclosures of Gelbart and Alince et al.

Based on this reasoning, the Applicant submits that claim 6 patentably distinguishes the combination of Gelbart, Alince et al. and Cusdin et al.

# Claims 19-20

The Examiner has raised the combination of Gelbart, Alince et al. and Wolber et al. in relation to claims 19 and 20. The Applicant submits that claims 19 and 20 patentably distinguish the combination of Gelbart, Alince et al. and Wolber et al.

Claims 19 and 20 depend from claim 1. As discussed above in relation to claim 1, the combination of Gelbart and Alince et al. fails to teach or suggest the claim 1 combination of

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"obtaining, in a controller, electronic data corresponding to a location of at least one edge of the printing plate; and while the printing plate is on the drum: ... applying an edge masking layer to the at least one edge, the edge masking layer masking at least a portion of the photosensitive imageable layer on the at least one edge; ... wherein applying the edge masking layer comprises automatically applying the edge masking layer in the location of the at least one edge under control of the controller." Wolber et al. fail to remedy this deficiency with the disclosures of Gelbart and Alince et al.

Based on this reasoning, the Applicant submits that claims 19 and 20 patentably distinguish the combination of Gelbart, Alince et al. and Wolber et al.

### Claims 21-24 and 27

The Examiner has raised the combination of Gelbart, Alince et al. and Cusdin et al. in relation to claims 21-24 and 27.

Claim 21 recites the combination of "obtaining, in a controller, electronic data corresponding to locations of one or more edges of the one or more plate sections; and while the sleeve is on the drum and under control of the controller, automatically applying an edge masking layer to the one or more edges of the one or more plate sections in the obtained locations, the edge masking layer masking at least a portion of each of the one or more edges of the one or more plate sections."

As discussed above in relation to claim 1, neither Gelbart nor Alince et al. disclose the claim 21 features of "obtaining, in a controller, electronic data corresponding to locations of the one or more edges of the one or more plate sections" or "under control of the controller, automatically applying an edge masking layer to the one or more plate sections in the obtained locations". As discussed above in relation to claim 6, Cusdin et al. fail to remedy this deficiency with Gelbart and Alince et al.

For the reasons discussed above, the Applicant submits that it would not be obvious to further modify the Alince et al. edge masking technique to obtain electronic data relating to edge locations in a controller and to apply the edge-masking material under the control of the controller.

Based on this reasoning, the Applicant submits that claim 21 patentably distinguishes the combination of Gelbart, Alince et al. and Cusdin et al. Claims 22-24 and 27 depend from

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claim 21 and are submitted to be patentable over the combination of Gelbart, Alince et al. and Cusdin et al. for at least this reason.

Furthermore, claim 27 recites that "obtaining, in the controller, electronic data corresponding to locations of one or more edges of the one or more plate sections, comprises determining the locations of the one or more edges based on at least one of: format data provided to an automated printing plate cutting device; and format data provided to a printing plate mounting device." The combination of Gelbart, Alince et al. and Cusdin et al. fails to disclose or suggest this claim 27 feature. In particular, Gelbart, Alince et al. and Cusdin et al. provide no disclosure relating to plate cutting devices, plate mounting devices or format data provided to such devices. Accordingly, the Applicant submits that claim 27 further distinguishes the combination of Gelbart, Alince et al. and Cusdin et al.

## Claims 28 and 29

The Examiner has raised the combination of Gelbart, Alince et al., Cusdin et al. and Wolber et al. in relation to claims 28 and 29. The Applicant submits that claims 28 and 29 patentably distinguish the combination of Gelbart, Alince et al., Cusdin et al. and Wolber et al.

Claims 28 and 29 depend from claim 21. As discussed above, the combination of Gelbart, Alince et al. and Cusdin et al. fails to teach or suggest the claim 21 combination of "obtaining, in a controller, electronic data corresponding to locations of one or more edges of the one or more plate sections; and while the sleeve is on the drum and under control of the controller, automatically applying an edge masking layer to the one or more edges of the one or more plate sections in the obtained locations, the edge masking layer masking at least a portion of each of the one or more edges of the one or more plate sections." Wolber et al. fails to remedy this deficiency with Gelbart, Alince et al. and Cusdin et al.

Based on this reasoning, the Applicant submits that claims 28 and 29 patentably distinguishes the combination of Gelbart, Alince et al., Cusdin et al. and Wolbert et al.

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#### Claims 30-31, 33-36, 39-40 and 43

The Examiner has raised the combination of Gelbart and Alince et al. in relation to claims 30-31, 33-36, 39-40 and 43. The Applicant submits that claims 30-31, 33-36, 39-40 and 43 patentably distinguish the combination of Gelbart and Alince et al.

Claim 30, as amended, recites the combination of "obtaining, in a controller, electronic data corresponding to a location of at least one edge of the printing plate; and while the printing plate is on the drum: ... automatically applying an edge masking layer to the printing plate in the location of the at least one edge under control of the controller, the edge masking layer masking at least a portion of the photopolymer layer on the at least one edge."

As correctly pointed out by the Examiner in the first full paragraph on page 6 of the Office Action, Gelbart fails to teach or suggest the claim 30 feature of applying an edge masking layer to the printing plate to mask one or more edges of the printing plate's photopolymer layer. As discussed above in relation to claim 1, while Alince et al. disclose an edge-coating material for application to the edges of a photo-polymerizable printing plate, Alince et al. fail to teach or suggest the claim 30 features of "obtaining, in a controller, electronic data corresponding to a location of at least one edge of the printing plate" and "automatically applying an edge masking layer to the printing plate in the location of the at least one edge under control of the controller".

The Applicant submits, for the reasons discussed above, that it would not be obvious to further modify the Alince et al. edge masking technique to obtain electronic data relating to edge locations in a controller and to apply the edge-masking material under the control of the controller.

Based on this reasoning, the Applicant submits that claim 30 patentably distinguishes the combination of Gelbart and Alince et al. Claims 31, 33-36, 39-40 and 43 depend from claim 30 and are submitted to patentably distinguish the combination of Gelbart and Alince et al. for at least this reason.

Furthermore, claim 39, as amended, recites that "automatically applying the edge masking layer to the printing plate is at least partially completed after commencing, but prior to completion of, imagewise applying the patterned surface mask layer to the printing area of the printing plate." This feature is not disclosed or suggested by either of Gelbart or Alince et al. Gelbart does not teach or suggest the application of an edge mask. Alince et al. disclose

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that the printing plate is pre-coated with a surface mask prior to mounting the plate on the sleeve and prior to applying edge-masking material to the edges of the plate. Alince also disclose that the edge-masking material is applied before patterning the surface mask with an image (see col. 2, ln. 16-28). Accordingly, Alince et al. do not disclose or suggest the claim 13 feature of applying the edge masking layer after commencing, but prior to completing, the imagewise application of a patterned surface mask layer. Based on this reasoning, the Applicant submits that claim 39 further distinguishes the combination of Gelbart and Alince et al.

Claim 40 recites that "obtaining, in the controller, electronic data corresponding to the location of the at least one edge comprises determining the location of the at least one edge based on at least one of; format data provided to an automated printing plate cutting device; and format data provided to a printing plate mounting device." The Applicant submits that neither Gelbart nor Alince et al. disclose or suggest this claim 40 feature. Neither Gelbart nor Alince et al. make any mention of printing plate cutting devices, printing plate mounting devices or format data provided to such devices. Accordingly, the Applicant submits that claim 40 further distinguishes the combination of Gelbart and Alince et al.

### Claim 32

The Examiner has raised the combination of Gelbart, Alince et al. and Cusdin et al. in relation to claim 32. The Applicant submits that claim 32 patentably distinguishes the combination of Gelbart, Alince et al. and Cusdin et al.

Claim 32 depends from claim 30. As discussed above, the combination of Gelbart and Alince et al. fails to teach or suggest the claim 30 combination of "obtaining, in a controller, electronic data corresponding to a location of at least one edge of the printing plate; and while the printing plate is on the drum: ... automatically applying an edge masking layer to the printing plate in the location of the at least one edge under control of the controller". Cusdin et al. fail to remedy this deficiency with the disclosures of Gelbart and Alince et al.

Based on this reasoning, the Applicant submits that claim 32 patentably distinguishes the combination of Gelbart, Alince et al. and Cusdin et al.

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#### Claims 41 and 42

The Examiner has raised the combination of Gelbart, Alince et al. and Wolber et al. in relation to claims 41 and 42. The Applicant respectfully submits that claims 41 and 42 patentably distinguish the combination of Gelbart, Alince et al. and Wolber et al.

Claims 41 and 42 depend from claim 30. As discussed above, the combination of Gelbart and Alince et al. fails to teach or suggest the claim 30 combination of "obtaining, in a controller, electronic data corresponding to a location of at least one edge of the printing plate; and while the printing plate is on the drum: ... automatically applying an edge masking layer to the printing plate in the location of the at least one edge under control of the controller." Wolber et al fail to remedy this deficiency with the disclosures of Gelbart and Alince et al.

Based on this reasoning, the Applicant submits that claims 41 and 42 patentably distinguish the combination of Gelbart, Alince et al. and Wolber et al.

#### Claims 44-46, 48-51 and 54-58

The Examiner has raised the combination of Gelbart and Alince et al. in relation to claims 44-46, 48-51 and 54-58. The Applicant respectfully submits that claims 44-46, 48-51 and 54-58 patentably distinguish the combination of Gelbart and Alince et al.

Claim 44, as amended, recites the combination of "obtaining, in a controller, electronic data corresponding to a location of at least one edge of the printing plate; and ... automatically applying an edge masking layer to the printing plate in the location of the at least one edge under control of the controller, the edge masking layer masking at least a portion of the photopolymer layer on the at least one edge".

As correctly pointed out by the Examiner in the first full paragraph on page 7 of the Office Action, Gelbart fails to teach or suggest the claim 44 feature of applying an edge masking layer to the printing plate to mask one or more edges of the photopolymer layer. As discussed above in relation to claim 1, while Alince et al. disclose an edge-coating material for application to the edges of a photo-polymerizable printing plate, Alince et al. fail to disclose or suggest the claim 44 features of "obtaining, in a controller, electronic data corresponding to a location of at least one edge of the printing plate" or "automatically

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applying an edge masking layer to the printing plate in the location of the at least one edge under control of the controller".

For the reasons discussed above, the Applicant submits that it would not be obvious to further modify the Alince et al. edge masking technique to obtain electronic data relating to edge locations in a controller and to apply the edge-masking material under the control of the controller.

Based on this reasoning, the Applicant submits that claim 44 patentably distinguishes the combination of Gelbart and Alince et al. Claims 45-46, 48-51 and 54-58 depend from claim 44 and are submitted to patentably distinguish the combination of Gelbart and Alince et al. for at least this reason.

Furthermore, claim 57 recites that "the integral surface mask layer comprises a positive working material and the edge masking layer comprises a negative working material". This feature is not disclosed or suggested by either Gelbart or Alince et al. Gelbart does not teach or suggest the application of an edge mask. Alince et al. do not teach or suggest that the edge mask can operate using a process different than that of the surface mask. Alince et al. specifically teach at col. 4, ln. 7-14, that after application, the edge masking material is merely dried and then used as a mask without further processing. This is not a characteristic of a negative working mask material. The Examiner expresses the view that this claim 57 feature would be obvious to a person skilled in the art in order to produce a more precise printing plate. The Applicant respectfully submits that the Examiner has misinterpreted the features of this claim. The provision of a surface mask as a positive working material and an edge mask as a negative working material is not directly correlated to the precision of a printing plate. Accordingly, a person skilled in the art would not be motivated to modify the teachings of Gelbart and/or Alince et al. to provide a positive working surface mask and a negative working edge mask for the purpose of improving the precision of a printing plate. Based on this reasoning, the Applicant submits that claim 57 patentably distinguishes the combination of Gelbart and Alince et al.

Claim 58 recites that "obtaining, in the controller, electronic data corresponding to the location of the at least one edge comprises determining the location of the at least one edge based on at least one of: format data provided to an automated printing plate cutting device; and format data provided to a printing plate mounting device." The Applicant submits that neither Gelbart nor Alince et al. disclose or suggest this claim 58 feature. Neither Gelbart nor

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Alince et al. make any mention of printing plate cutting devices, printing plate mounting devices or format data provided to such devices. Accordingly, the Applicant submits that claim 58 further distinguishes the combination of Gelbart and Alince et al.

## Claim 47

The Examiner has raised the combination of Gelbart, Alince et al. and Cusdin et al. in relation to claim 47. The Applicant submits that claim 47 patentably distinguishes the combination of Gelbart, Alince et al. and Cusdin et al.

Claim 47 depends from claim 44. As discussed above, the combination of Gelbart and Alince et al. fails to teach or suggest the claim 44 combination of "obtaining, in a controller, electronic data corresponding to a location of at least one edge of the printing plate; and ... automatically applying an edge masking layer to the printing plate in the location of the at least one edge under control of the controller". Cusdin et al. fail to remedy this deficiency with the disclosures of Gelbart and Alince et al.

Based on this reasoning, the Applicant submits that claim 47 patentably distinguishes the combination of Gelbart, Alince et al. and Cusdin et al.

### Claims 59 and 60

The Examiner has raised the combination of Gelbart, Alince et al. and Wolber et al. in relation to claims 59 and 60. The Applicant respectfully submits that claims 59 and 60 patentably distinguish the combination of Gelbart, Alince et al. and Wolber et al.

Claims 59 and 60 depend from claim 44. As discussed above, the combination of Gelbart and Alince et al. fails to disclose or suggest the claim 44 combination of "obtaining, in a controller, electronic data corresponding to a location of at least one edge of the printing plate; and ... automatically applying an edge masking layer to the printing plate in the location of the at least one edge under control of the controller". Wolber et al fail to remedy this deficiency with the disclosures of Gelbart and Alince et al.

Based on this reasoning, the Applicant submits that claims 59 and 60 patentably distinguish the combination of Gelbart, Alince et al. and Wolber et al.

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### Claims 70 and 71

The Applicant has added new claims 70 and 71. New claims 70 and 71 are submitted to be completely supported by the application as originally filed and to add no new matter. New claims 70 and 71 depend from independent claim 21 and are submitted to be allowable for at least this reason.

# **Conclusions**

In view of the amendments discussed above, the Applicant submits that this application is now in condition for allowance and respectfully requests reconsideration and allowance of this application in light of the foregoing amendments and comments.

Respectfully submitted,

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